

WHAT IS CLAIMED IS:

1. An atomizer that does not require the use of a propellant for administering liquids to the cornea or conjunctiva of the human or animal eye comprising :
an upper housing part,
a locking mechanism,
a spring housing,
a spring,
a pump housing which is secured in the upper housing part and which comprises at one end a nozzle body with a nozzle or nozzle arrangement,
a hollow plunger with valve body,
a power takeoff flange in which the hollow plunger is secured and which is located in the upper housing part,
a locking mechanism situated in the upper housing part,
a spring housing with a spring contained therein, which is rotatably mounted on the upper housing part by means of a rotary bearing,
a lower housing part which is fitted onto the spring housing in the axial direction,
a storage vessel for the liquid to be administered, and
an adapter in the form of a cavity surrounded by a wall with two openings, wherein
 - one opening surrounds the nozzle in such a way that a jet spray emerging therefrom is conveyed exclusively into the cavity and
 - the second opening, which is opposite from the first, and which has an outer contour which is such that the opening surrounds the visible part of the eye of a person or animal without directly touching the eye.
2. The atomizer according to claim 1, characterised in that the outer contour of the second opening of the adapter is oval in plan view and in cross section takes the form of a concave curved line with a longer end and a shorter end.
3. The atomizer according to claim 1, characterised in that the adapter is indivisibly attached to the atomizer as an integral part thereof.
4. The atomizer according to claim 1, characterised in that the adapter is fitted onto a projection close to the nozzle.

5. The atomizer according to claim 1, characterised in that the average particle size in the spray mist produced thereby is between about 1 and about 20 microns.

6. The atomizer according to claim 1, characterised in that the average speed of the particles in the spray mist produced, at a spacing from the nozzle of about 1 to about 5 cm, is no more than about 50 metres per second.

7. The atomizer according to claim 1, characterised in that openings in the adaptor are provided in the side wall of the adaptor.